

contain subject matter which was described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. This rejection is respectfully traversed and reconsideration is requested for the reasons which follow.

Specifically the examiner took the position that the limitation of claim 29 which requires, "forming on a surface of a substrate material, a barrier film comprising a monolayer of metal atoms, said metal atoms being selected from the group consisting of barium, strontium and cesium atoms, singly or in combination thereof" is not enabled by the specification as originally filed. The examiner stated that the specification is enabling for forming a monolayer of barium atoms on the basis of the disclosure at page 12, lines 9-22, page 13 and page 14, lines 1-16. However, the Examiner also stated that the specification does not provide enablement for forming a barrier film comprising a monolayer of a combination of barium, strontium and cesium atoms.

First, a barrier film comprising a monolayer of a combination of barium, strontium and cesium atoms can be produced by the same two methods of the present invention as are used for forming a barrier film comprising only barium atoms, except that instead of using only a barium containing material as the starting material, it would be necessary to use a mixture of at least to a barium, strontium and cesium containing materials or to sequentially apply the materials by first making a partial monolayer with one material, and then completing the monolayer with a second material in order to form a monolayer having a combination of barium, strontium and cesium atoms. These two methods are described at pages 7-8 (method 1 using vacuum deposition) and at page 32 (method 2 using molecular beam epitaxy (MBE)).

Second, the present specification does, in fact, describe a suitable process for making a monolayer of a combination of barium, strontium and cesium atoms at page 7, line 8, to page 8, line 14. Also, the present specification provides a list of suitable starting materials which can be used to prepare such a combination at page 32, lines 7-10. Finally, the application as originally filed described a suitable process for making a barrier layer having a combination of barium, cesium and strontium atoms in original claim 15.

Third, in the description of the process for making a monolayer of barium found on pages 12-14 of the specification, it is also stated that, "...BaF₂ is used to illustrate the metal halide, ... although other materials can be used as indicated elsewhere herein" (page 12, lines 18-20). Such

other materials are listed at page 32, lines 7-10 and in original claim 15 (i.e. combinations of two or more of barium, strontium and cesium).

Thus, upon review of the application as originally filed, the skilled person is capable of making a barrier layer comprising a monolayer of barium, strontium and cesium atoms based on the teachings cited above.

Should the Examiner consider it necessary to amend the specification to incorporate the subject matter of original claim 15 therein, the applicant would be willing to make such an amendment in order to obtain allowance of the application.

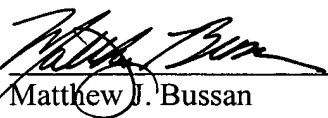
Conclusion

In view of the foregoing and remarks, Applicants respectfully submit that all of the pending claims are in condition for allowance and respectfully request a favorable Office Action so indicating.

Respectfully submitted,

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